REMARKS

In accordance with the foregoing, claims 1 and 17 have been amended. Claims 1-12 and 14-24 are pending and under consideration.

In the Office Action, the Examiner rejects claim 1 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,520,819 to Sakaguchi in view of Japanese Patent Publication 2000-323276 to Shunichi et al. Claim 17 is rejected as being obvious over Shunichi et al. in view of Sakaguchi. The remaining claims have been allowed.

Independent claims 1 and 17 have been amended to recite that two or more pixel sites are filled by a capillary phenomenon. For antecedent basis purposes, the Examiner is referred to allowed claim 18, which recites that grooves are filed by capillary phenomenon.

Sakaguchi relates to an organic electroluminescence (EL) panel and a method of fabricating same. Referring to the plan view shown in Fig. 9 of the reference, plural anode electrodes 2 are formed in parallel with spaces in between, in a stripe like configuration. A plurality of cathode electrodes 14 are formed in parallel with spaces there between, also in a stripe like configuration. The cathode electrodes 14 are generally perpendicular to the anode electrodes 2. To separate the cathode electrodes 14 from one another, a partition 11 is shown. Referring also to Fig. 3G, a red emission layer 120, a green emission layer 121 or a blue emission layer 122 is formed in the region of the cathode electrodes 14. It appears that the colored emission layers are formed as dots, where each anode electrode 2 crosses each cathode electrode 14.

In forming the Sakaguchi structure, an anode electrode layer 2, a charge generation layer 3 and a charge transfer layer 4 are laminated in that order on a transparent substrate 1 as shown in the cross-sectional view of Fig. 3G. The partitions 11 are formed on the charge transfer layer 4, and any one of the red emission layer 120, the green emission layer 121 and the blue emission layer 122 may be formed on the charge transfer layer, with the partitions 11 separating the various colors. An electron transport layer 13 is formed on the emission layers 120, 121 and 122. The cathode electrodes 14 are formed on the electron transport layer 13.

The emission layers are formed by depositing a host and a dopant while a shadow mask 180 covers the portions where the deposition should not be performed. See Fig. 3F and the related description in Sakaguchi. The emission layers 120,121 and 122 are clearly not formed due to a capillary phenomenon. They are formed with the deposition technique described.

With regard to Shunichi et al., this reference relates to a method of manufacturing an

organic EL element. In the method, a luminescent layer or the like is formed for every pixel by painting an ink composite solution containing the luminescent material using an inkjet method. Shunichi et al. does not use a capillary phenomenon to form the luminescent layers.

Both independent claims 1 and 17 recite that an insulating film is formed on a substrate, and grooves are formed in the insulating film, which grooves extend over two or more pixel sites. According to the claims, the grooves are filed with a solution, the grooves being filled by a capillary phenomenon.

In contrast, Sakaguchi forms a groove extending over two or more pixels, which groove is filled with an organic EL material by deposition. The groove is not filled with a solution by a capillary phenomenon. Sakaguchi does not suggest this feature.

As to Shunichi et al., this reference employs an ink composite solution containing a luminescent material. However, Shunichi et al. fills every pixel with an inkjet method. Shunichi et al. does not suggest filling grooves extending over two or more pixel sites by a capillary phenomenon. It would be impossible for an inkjet method to fill the grooves extending over two or pixel sites with material in a single operation. This is because in the inkjet process, the ink is emitted in a constant direction, and the amount of ink emitted at one time is limited. If one attempted to modify the inkjet method to emit significantly more solution, then some of the benefits of the inkjet method would be lost, and a non-uniform, less precise filling operation would occur.

None of the cited references disclose a concrete way for filling a groove extending over two or more pixel sites with a solution, in a single operation. As described above, both Sakaguchi and Shunichi et al. are quite different from each other in the material and the filling method employed. There is no motivation for combining Sakaguchi and Shuichi et al., and even if the references could be combined, the present invention would not result.

In view of the forgoing amendments and remarks, it is submitted that claims 1 and 17 patentability distinguish over any proper combination of the cited references, and therefore the prior art rejection should be withdrawn.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge

the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Dec 7 2005

By: MJHenry

Mark J. Henry
Registration No. 36,162

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501